



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/721,025	11/24/2003	Robert J. Brilon	Dura 124	5021
29607	7590	03/02/2005	EXAMINER	
DURASWITCH 234 S. EXTENSION SEC. 103 MESA, AZ 85210			DONOVAN, LINCOLN D	
			ART UNIT	PAPER NUMBER
			2832	

DATE MAILED: 03/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/721,025

Applicant(s)

BRILON ET AL.

Examiner

Lincoln Donovan

Art Unit

2832

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 18 November 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 2, 11 and 16-18 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 15, 19 and 20 is/are allowed.
- 6) ☒ Claim(s) 1, 3-10 and 12-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

Art Unit: 2832

DETAILED ACTION

***Election/Restrictions***

Claims 2, 11 and 16-18 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected claimed species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 11-18-04.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3-10, 12-15 and 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicant's admitted prior art shown in figures 1-3, AAPA, hereinafter in view of Lynn et al. [US 4,096,364].

AAPA discloses an armature [2] for use with a magnetically coupled pushbutton switch having a magnetic coupling layer [4] and a substrate layer [8] comprising:

- a switch element [7];
- an electrically conductive magnetic material [4] having top and bottom surfaces;

and

- a crown [10] that raises above the top surface being closet to a heel end of the armature and farthest from a toe end of the armature.

Regarding claim 1, AAPA disclose everything claimed except at least one protuberance that is closer to the heel end than to the tow end of the armature such that when the armature is in a rest position within the magnetically coupled pushbutton switch, there is a gap between the magnetic coupler layer and the heel end of the armature.

Lynn et al. discloses an actuator [27] for a switch having a heel end with at least one protuberance [27-1] that is closer to the heel end than to the tow end of the actuator such that when the actuator is in a rest position within the magnetically coupled pushbutton switch, there is a gap between the magnetic coupler layer and the heel end of the actuator.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include a protuberance on the armature of AAPA, as suggested by Lynn et al. in order to provide a pivot point for the armature/actuator.

Regarding claims 3-4, AAPA discloses the armature being stamped to include the crown on a top surface thereof. It would have been obvious to one of ordinary skill in the art at the time the invention was made to also stamp the protuberance in order to facilitate manufacture.

Regarding claim 5, AAPA, as modified, disclose everything claimed except a plurality of symmetrical protuberances.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a plurality of symmetrical protuberances on the armature of

AAPA in order to accommodate a larger armature/actuator and distribute load applied thereto evenly.

Regarding claim 7, AAPA disclose the armature including toe pads [figure 3].

Regarding claim 8, AAPA disclose everything claimed except the explicit disclosure of the conductive magnetic material being a magnetic material that is plated to be conductive.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a conductive coating on the magnetic material in order to optimize both conduction and magnetic forces.

Regarding claims 9 and 14, AAPA further discloses a spacer [12] to house the armature.

Regarding claim 10, AAPA, as modified, disclose everything claimed except a plurality of symmetrical protuberances.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a plurality of symmetrical protuberances on the armature of AAPA in order to accommodate a larger armature/actuator and distribute load applied thereto evenly.

Regarding claim 12, AAPA discloses the armature being stamped to include the crown on a top surface thereof. It would have been obvious to one of ordinary skill in the art at the time the invention was made to also stamp the protuberance in order to facilitate manufacture.

Regarding claim 13, AAPA disclose the armature including toe pads [figure 3].

***Allowable Subject Matter***

Claims 15 and 19-20 are allowed.

Claim 6 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

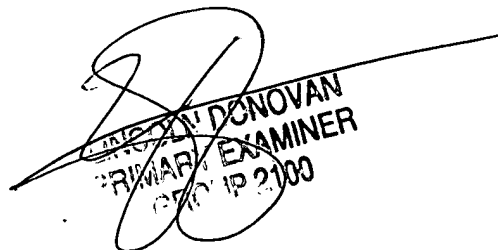
***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lincoln Donovan whose telephone number is 571-272-1988. The examiner can normally be reached on M-F 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Elvin Enad can be reached on 571-272-1990. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ldd

  
LINCOLN DONOVAN  
PRIMARY EXAMINER  
GROUP 2100